



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/533,132	10/11/2005	Tetsuroh Nakamura	2005_0724A	4164

513 7590 09/07/2006

WENDEROTH, LIND & PONACK, L.L.P.  
2033 K STREET N. W.  
SUITE 800  
WASHINGTON, DC 20006-1021

EXAMINER

AL HASHIMI, SARAH

ART UNIT PAPER NUMBER

2853

DATE MAILED: 09/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/533,132

**Applicant(s)**

NAKAMURA ET AL.

**Examiner**

Sarah Al-Hashimi

**Art Unit**

2853

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 11 October 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 April 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>4/29/2005</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. **Claims 1,3-16** are rejected under 35 U.S.C. 102(b) as being anticipated by Nakamura US 2002/0140918.

**Nakamura** teaches:

**Claim 1:** a light source for an image writing apparatus (Fig 1 #2) for focusing light emitted from light emitting elements provided on a specific substrate on a photosensitive drum and forming an image thereon (fig 1 #11 on #3, #6 drum), said light source wherein the light emitting elements are disposed on the substrate in a zigzag manner (fig 9).

**Claim 3:** the light source wherein the substrate is a light transmitting means for focusing light emitted from the light emitting elements on the photosensitive drum and forming an image thereon (abstract "a light emission layer formed on a transparent substrate" and being transparent, the substrate allows for light to be transmitted and focused on the photosensitive drum to form an image").

**Claim 4:** the light source wherein the light transmitting means for focusing light emitted from the light emitting element on the photosensitive drum and forming an image thereon is formed on an opposite surface to the light emitting

elements of the substrate so as to be incorporated together (Fig 1 #11 light emitting elements, #7 light transmitting means).

**Claim 5:** the light source wherein the distance between the light emitting element and the light transmitting means is fixed by a thickness of the substrate (Fig 1 #3 is a substrate separating #11 and #7 by a fixed thickness).

**Claim 6:** the light source wherein the distance between the light emitting element and the light transmitting means is fixed by a fixing frame for fixing the distance between the light emitting element and the light transmitting means (Fig 17a S is a spacer between #2 the light emitting element and #40 the light transmitting means).

**Claim 7:** the light source wherein the light transmitting means is a lens alley comprising a plurality of single lenses (fig 5 #14).

**Claim 8:** the light source according to claim 7 wherein one of the light emitting elements is made to correspond to one of the single lenses (Fig 16a #4, #41).

**Claim 9:** the light source according to claim 7 wherein one of the light emitting elements is made to correspond to a plurality of the single lenses (Fig 1 #11 corresponds to the array #7).

**Claim 13:** the light source according to claim 4, wherein the light transmitting means is a lens alley comprising a plurality of single lenses (fig 5 #14).

**Claim 14:** the light source according to claim 13 wherein one of the light emitting elements is made to correspond to one of the single lenses (Fig 16a #4, #41).

**Claim 15:** the light source according to claim 13 wherein one of the light emitting elements is made to correspond to a plurality of the single lenses (Fig 1 #11 corresponds to the array #7).

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. **Claim 10** is rejected under 35 U.S.C. 103(a) as being unpatentable over Nakamura in view of Hase 6,552,774.

**Nakamura** teaches all of the limitations as noted above but does not teach:

**Claim 10:** the light source according to claim 7 wherein a plurality of the light emitting elements is made to correspond to one of the single lenses.

**Claim 16:** the light source according to claim 13 wherein a plurality of the light emitting elements is made to correspond to one of the single lenses.

**Hase** teaches:

**Claim 10:** the light source according to claim 7 wherein a plurality of the light emitting elements is made to correspond to one of the single lenses (Fig 1 #22 and lb1 and lb2 both rays go through a single lens).

**Claim 16:** the light source according to claim 13 wherein a plurality of the light emitting elements is made to correspond to one of the single lenses (Fig 1 #22 and lb1 and lb2 both rays go through a single lens).

**Therefore** it would have been obvious to a person having skill in the art to modify Nakamura's invention to incorporate Hase's light source wherein a plurality of the light emitting elements is made to correspond to one of the single lenses in order to better focus the light and thereby create an improved image on the imaging member.

5. **Claim 2** is rejected under 35 U.S.C. 103(a) as being unpatentable over Nakamura in view of Seki US 20040021762 A1.

**Nakamura** teaches all of the limitations as noted above but does not teach:

**Claim 2:** the light source according to claim 1, wherein the light emitting element comprises an organic electro luminescence.

**Seki** teaches:

**Claim 2:** the light source according to claim 1, wherein the light emitting element comprises an organic electro luminescence (abstract line 2 "organic EL array exposure head").

**Therefore** it would have been obvious to a person having skill in the art to modify Nakamura's invention to incorporate Seki's organic electro luminescent light emitting element because it would cost less to manufacture such a light source.


### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sarah Al-Hashimi whose telephone number is 571 272 7159. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Meier can be reached on 571 272 2149. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

S.A.



LAMSON NGUYEN  
PRIMARY EXAMINER  
09/23/06